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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/756,830	11/20/96	BEAMAN	Y0995-023X

B2M1/0211

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EXAMINER
NGUYEN, V

ART UNIT	PAPER NUMBER
2213	9

DATE MAILED: 02/11/98

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**08/756,830**

Applicant(s)  
**Beaman et al**

Examiner  
**VINH P. NGUYEN**

Group Art Unit  
**2213**



☒ Responsive to communication(s) filed on Dec 18, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 2-22 and 36-49 is/are pending in the application.

Of the above, claim(s) 2-15, 19-21, 43, 45, 47, and 48 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 16-18, 22, 36-42, 44, 46, and 49 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. Applicant's election of SPECIES OF FIGURES 1-7 including claims 16-18,36-42,44 and 46 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. In the species election filed on 12/18/97, Applicants indicated that claims 16-22,36-46 and 49 are read on species of figures 1-9 and these claims are generic. It appears that claims 19-21,43 and 45 are not read on elected species of figures 1-7 and they are not generic. If Applicants still believe that these claims 19-21,43 and 45 are read on elected species and they are generic, it would be appreciated that Applicants show how these claims read on elected species and how they are considered as generic.

3. Claims 2-15,19-21,23,43, 45 and 47-48 are withdrawn from further consideration by the examiner, 37 CAR 1.142(b) as being drawn to a non-elected species. Election was made **without** traverse in Paper No. 8.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

✓ 5. Claims 16-18,36-37<sup>22</sup> and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Beaman et al (Pat # 4,998,885).

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As to claims 16-18,36-37<sup>22</sup> and 49, Beaman discloses an elastomeric area array interposer (as shown in figure # 5) having a substrate (20), a plurality of conductive members (23,30,40,50) on the surface of the substrate (20) and a sheet of material (60) with a plurality of openings disposed for alignment with the conductive members (23,30,40,50). It is noted that each of the members has an enlarged base (23,ball shaped contact), an elongated electrically conductive member (40) in contact with the base and extending away from the base, and a contact end (50)..

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 38-39,40-42,44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beaman et al (Pat # 4,998,885).

Beaman discloses an elastomeric area array interposer as described in paragraph # 5. As to claims 38-39, the material for the elastomeric sheet (60) such as polymer material is well known in the art. As to claim 42, the substrate type such as ceramic would have been well known in the art. As to claims 40-41,44 and 46, it would have been well known for one of ordinary skill in the probe art to coat the contact ends (50) with two layers selected from the group consisting of

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Cr,Ti,TiN,Ni,Zr,ZrN,Co,Pt,Ir,Rh,Ru and Pd in order to have a better conduction and durable contact ends or tips.


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beaman et al disclose three dimensional high performance interconnection package.

Luttmer (pat # 3,795,037) discloses electrical connector device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

  
VINH P. NGUYEN  
PRIMARY EXAMINER  
ART UNIT 2213  
02/06/98